

ABSTRACT OF THE DISCLOSURE

The present invention provides a liquid crystal display comprising: a liquid crystal panel including a plurality of gate lines, a plurality of data lines perpendicularly intersecting the gate lines, a plurality of liquid crystal capacitors coupled to a previous gate line and having liquid crystals between pixel electrodes and a common electrode, and a plurality of thin film transistors connected to the pixel electrodes of the liquid crystal capacitors; a timing controller receiving image signals and synchronization signals, and generating control signals; a gate driver sequentially applying a stepped-wave pattern gate voltage to a plurality of the gate lines, the stepped-wave pattern gate voltage including a first interval for converting a pixel grayscale level of a subsequent gate line formed in a previous frame to a first gray level, and a second interval for forming a path through which data voltage is applied by controlling the thin film transistors to on; and a data driver for applying a data voltage of a second grayscale level supplied to the liquid crystal capacitors of the liquid crystal panel according to the control signals of the timing controller.